IN THE CLAIMS

Please amend claims 1, 4, 5, 6, 8 and 9 as follows and cancel claims 10, 11 and 12:

1. *(currently amended)* A panoramic dental X-raying method, comprising emitting [[an]] a substantially constant intensity X-ray beam (12) from a radiation source (9) provided in a rotating arm (7), guiding said beam through the dental arch (1) to a recorder (11) disposed opposite the radiation source in the arm in order to form an image, rotating the arm so as to form an image of substantially the entire width of the dental arch, limiting the X-ray beam (12) by a shutter (13) in the front area of the dental arch (1) as compared to the two sides of the arch, in order to increase in said front area the thickness of the layer (4) of which a sharp image is formed, and retarding the movement of the X-ray beam (12) in said front area of the dental arch (1) compared to the two sides of the arch.

2. *(original)* A method as defined in claim 1, wherein narrowing of the X-ray beam and retardation of its movement are performed concomitantly to achieve a substantially constant exposure of the dental arch to X-rays through the entire length of the arch.

3. *(original)* A method as defined in claim 2, wherein the X-ray beam is first narrowed and then widened by sliding movements of the shutter, accompanied by simultaneous gradual retardation and acceleration of the movement of the X-ray beam so as to subject the arch to a substantially constant exposure to X-rays through the entire length of the arch.

4. *(currently amended)* A method as defined in claim 1, wherein the X-ray beam (12) is narrowed in a sector of the dental arch (1) having a central angle of about 60-80°~~, preferably about 70°~~.

5. *(currently amended)* A method as defined in claim 4, wherein the movement of the X-ray beam is retarded in a sector of the dental arch having a central angle of about 60-80°~~, preferably 70°~~.

6. *(currently amended)* A method as defined in claim 1, wherein the maximal retardation of the movement of the X-ray beam in the front area is 40 - 60%~~, preferably about 50%~~ as compared to the sides of the arch.

7. *(original)* A method as defined in claim 1, wherein the X-ray beam (12) is narrowed in the front area of the dental arch (1) so as to increase the thickness of the sharp layer (4) by 50% or more as a result of the decreased width.

8. *(currently amended)* A method as defined in claim 7, wherein the thickness of the sharp layer (4) is set [[as]] at least about 1.5 cm in the front area of the dental arch (1).

9. *(currently amended)* A method as defined in claim 1, wherein the shutter (13) comprises an elongated aperture [[(2)]] (29), which allows radiation to pass through and whose width is decreased and increased under mechanical control of the rotational movement of the arm (7).

10. *(cancelled)*

11. *(cancelled)*

12. *(cancelled)*